

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (currently amended) A storage device controller comprising:
channel control portions each including a circuit board on which a file access processing portion for receiving file-by-file data input/output requests sent from information processors and an I/O processor for outputting I/O requests corresponding to said data input/output requests to storage devices are formed, said channel control portions being classified into groups for the sake of fail-over; and

a processing portion [[for deciding]] configured to decide that data updated by each of said channel control portions and handed over at the time of said fail-over are stored in a shared volume which is a storage region logically set on physical storage regions provided by said storage devices and which can be accessed commonly by any other channel control portion belonging to the same group as said channel control portion updating said data.

2. (currently amended) A storage device controller comprising:
channel control portions each including a circuit board on which a file access processing portion for receiving file-by-file data input/output requests sent from information processors and an I/O processor for outputting I/O requests corresponding to said data input/output requests to storage devices are formed, said channel control portions being classified into groups for the sake of fail-over; and

a processing portion [[for deciding]] configured to decide that data updated by each of said channel control portions and handed over at the time of said fail-over are stored in a shared memory which is contained in said storage device controller and which can be accessed commonly by said channel control portions.

3. (currently amended) A storage device controller comprising:
channel control portions each including a circuit board on which a file access processing portion for receiving file-by-file data input/output requests sent from information

processors and an I/O processor for outputting I/O requests corresponding to said data input/output requests to storage devices are formed, said channel control portions being classified into groups for the sake of fail-over; and

a processing portion [[for deciding]] configured to decide that data updated by each of said channel control portions and handed over at the time of said fail-over are sent to another channel control portion belonging to the same group as said channel control portion updating said data, through a network connecting said channel control portions to one another.

4. (original) A storage device controller according to Claim 1, wherein:
local volumes which are storage regions logically set on said physical storage regions provided by said storage devices and which can be accessed by said channel control portions individually and respectively are assigned to said channel control portions respectively; and

said processing portion further decides that said data are stored in said local volume of the other channel control portion belonging to the same group as said channel control portion updating said data.

5. (original) A storage device controller according to Claim 1, wherein:
local volumes which are storage regions logically set on said physical storage regions provided by said storage devices and which can be accessed by said channel control portions individually and respectively are assigned to said channel control portions respectively;

said processing portion further decides that said data are stored in said local volume of the other channel control portion belonging to the same group as said channel control portion updating said data;

said storage device controller further comprises an inherited data reference table on which reference destinations of said data are recorded; and

said processing portion reads said data from any one of said shared volume, said shared memory and said local volumes on the basis of said reference destinations of said data recorded in said inherited data reference table.

6. (original) A storage device controller according to Claim 3, wherein said processing portion sends said data to all said channel control portions in said storage device controller through said network when said data are shared data allowed to be referred to by all said channel control portions in said storage device controller.

7. (original) A storage device controller according to Claim 1, wherein said processing portion stores said data in a second shared volume which is a storage region logically set on physical storage regions provided by said storage devices and which can be accessed commonly by all said channel control portions in said storage device controller when said data are shared data allowed to be referred to by all said channel control portions in said storage device controller.

8. (original) A storage device controller according to Claim 1, wherein said data handed over at the time of said fail-over contain at least one of NFS user data, CIFS user data, system administrator data, fail-over heart beat, IP address of a channel control portion, NFS file lock information and cluster control information.

9. (currently amended) A control method for a storage device controller including channel control portions each having a circuit board on which a file access processing portion for receiving file-by-file data input/output requests sent from information processors and an I/O processor for outputting I/O requests corresponding to said data input/output requests to storage devices are formed, said channel control portions being classified into groups for the sake of fail-over, said control method comprising [[the step of]] deciding that data updated by each of said channel control portions and handed over at the time of said fail-over are stored in a shared volume which is a storage region logically set on physical storage regions provided by said storage devices and which can be accessed commonly by any other channel control portion belonging to the same group as said channel control portion updating said data.

10. (currently amended) A control method for a storage device controller including channel control portions each having a circuit board on which a file access processing portion for receiving file-by-file data input/output requests sent from information processors and an I/O processor for outputting I/O requests corresponding to said data

input/output requests to storage devices are formed, said channel control portions being classified into groups for the sake of fail-over, said control method comprising [[the step of]] deciding that data updated by each of said channel control portions and handed over at the time of said fail-over are stored in a shared memory which is contained in said storage device controller and which can be accessed commonly by said channel control portions.

11. (currently amended) A control method for a storage device controller including channel control portions each having a circuit board on which a file access processing portion for receiving file-by-file data input/output requests sent from information processors and an I/O processor for outputting I/O requests corresponding to said data input/output requests to storage devices are formed, said channel control portions being classified into groups for the sake of fail-over, said control method comprising [[the step of]] sending data updated by each of said channel control portions and handed over at the time of said fail-over to another channel control portion belonging to the same group as said channel control portion updating said data, through a network connecting said channel control portions to one another.

12. (currently amended) A control method for a storage device controller according to Claim 9, wherein:

local volumes which are storage regions logically set on said physical storage regions provided by said storage devices and which can be accessed by said channel control portions individually and respectively are assigned to said channel control portions respectively; and

said control method further comprises [[the step of]] storing said data in said local volume of the other channel control portion belonging to the same group as said channel control portion updating said data.

13. (currently amended) A control method for a storage device controller according to Claim 9, wherein:

local volumes which are storage regions logically set on said physical storage regions provided by said storage devices and which can be accessed by said channel control

portions individually and respectively are assigned to said channel control portions respectively;

said control method further comprises [[the steps of]]:

storing said data in said local volume of the other channel control portion belonging to the same group as said channel control portion updating said data;

referring to an inherited data reference table on which reference destinations of said data are recorded; and

reading said data from any one of said shared volume, said shared memory and said local volumes on the basis of said reference destinations of said data recorded in said inherited data reference table.

14. (currently amended) A control method for a storage device controller according to Claim 11, further comprising [[the step of]] sending said data to all said channel control portions in said storage device controller through said network when said data are shared data allowed to be referred to by all said channel control portions in said storage device controller.

15. (currently amended) A control method for a storage device controller according to Claim 9, further comprising [[the step of]] storing said data in a second shared volume which is a storage region logically set on physical storage regions provided by said storage devices and which can be accessed commonly by all said channel control portions in said storage device controller when said data are shared data allowed to be referred to by all said channel control portions in said storage device controller.

16. (original) A control method for a storage device controller according to Claim 9, wherein said data handed over at the time of said fail-over contain at least one of NFS user data, CIFS user data, system administrator data, fail-over heart beat, IP address of a channel control portion, NFS file lock information and cluster control information.

17. (canceled)

18. (canceled)